

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended): A hydrogen storage alloy material, comprising:

a composition, in atomic %, expressed by the following formula: $Zr_{100-a-b}Pd_aM_b$

$Zr_{100-a-b}Pd_aNi_b$ (wherein $15 \leq a \leq 40$, $2 < b \leq 10$, and M is at least one metal selected from the group consisting of Pt, Au, Fe, Co and Ni),

wherein said hydrogen storage alloy material has a structure where said Pd, said metal M-Ni and one or more compounds thereof are dispersed in a parent phase of ZrO_2 in the form of ultrafine particles, and

wherein said hydrogen storage alloy material being prepared by subjecting an amorphous alloy to a heat treatment in air or an oxygen atmosphere.

2. (Original): The hydrogen storage alloy material as defined in claim 1, which exhibits a hydrogen storage amount of 2.5 weight % or more in a weight ratio relative to Pd contained in said hydrogen storage alloy material.

3. (Previously Presented): The hydrogen storage alloy material as defined in claim 1 or 2, wherein the hydrogen storage alloy material is included in a hydrogen storage/transportation container.

4. (Currently Amended): A method for producing the hydrogen storage alloy material as defined in claim 1, comprising:

preparing a melt of a master alloy formed through a melting process;
rapidly solidifying said melt at a cooling rate of 10^4 K/s or more to form said
amorphous alloy; and
subjecting said amorphous alloy to an oxidizing heat treatment in air or an oxygen
atmosphere at 250 to 350°C to selectively oxidize said alloy element Zr so as to allow said Pd, said
~~metal M~~ Ni and one or more compounds thereof to be dispersed in a parent phase of ZrO_2 in the
form of nanoparticle-size ultrafine particles.